

In the Claims:

Please cancel without prejudice claims 1 to 7 and add the following new claims 8 to 12 as follows:

Claims 1 to 7 (canceled).

8(new). A process for motion-compensated prediction of moving images or pictures using an interpolation method considering past image points as well as neighboring image points, said process comprising the steps of:

- Q!
- a) making a motion-compensated picture signal ($\hat{s}_{tri}(t-1)$) using past image point information ($s_{tri}(t-2)$), wherein said past image point information is displaced or shifted to obtain said motion-compensated picture signal ($\hat{s}_{tri}(t-1)$) according to a previously determined motion vector ($L \cdot d(t-1)$);
 - b) producing an intermediate picture ($s_e(t-1)$) from a reference picture ($s'(t-1)$) by increasing scanning rate and inserting marker values (m) at intervening points between image points of the reference picture ($s'(t-1)$) to form an interpolation raster; and
 - c) replacing said marker values (m) in said intermediate picture ($s_e(t-1)$) at locations where image point information of said motion-compensated picture signal ($\hat{s}_{tri}(t-1)$) is present with said image point information of said motion-compensated picture signal.

9(new). The process as defined in claim 8, further comprising replacing said marker values (m) that are not replaced by said image point information of said motion-compensated picture signal ($\hat{s}_{tri}(t-1)$) by locally interpolated image data, thus producing a resulting interpolated picture signal ($s'_U(t-1)$).

10(new). A device for motion-compensated prediction of moving images or pictures comprising a time recursive interpolation filter;

wherein said time recursive interpolation filter includes

means (1) for increasing a scanning rate of a reference picture ($s'(t-1)$) and for inserting marker values (m) at intervening points between image points of the reference picture ($s'(t-1)$) to form an interpolation raster and an intermediate picture signal ($s_e(t-1)$);

an image memory (2) for storing past image point information ($s_{tri}(t-2)$);

means (4) for making a motion-compensated picture signal ($\hat{s}_{tri}(t-1)$) using said past image point information ($s_{tri}(t-2)$) according to a previously determined motion vector ($L \cdot d(t-1)$); and

a merging module (3) for replacing said marker values (m) in said intermediate picture ($s_e(t-1)$) at locations where image point information of said motion-compensated picture signal ($\hat{s}_{tri}(t-1)$) is present with said image point information of said motion-compensated picture signal.

11(new). The device as defined in claim 10, further comprising an interpolation stage (5) for local interpolation at said marker values (m) that are not replaced by said image point information of said motion-compensated picture signal ($S_{tri}(t-1)$).

Q' 12(new). The device as defined in claim 10, wherein said means (4) for making a motion-compensated picture signal ($S_{tri}(t-1)$) has a picture memory (6) and means for preparing a count index for each newly entered one of said image points in said picture memory (6), and, when one of said image points has a value of said count index corresponding to a predetermined dwell time limit, said one of said image points is removed from said picture memory (6).
